

In the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (Currently Amended): A demand dispatching method, comprising the steps of:
receiving a first demand;
providing a risk database recording risk information for a first demand, wherein
the risk information comprises a first percentage of a low risk part and a
second percentage of a high risk part of the first demand, a first order rate
for the low risk part, and a second order rate for the high risk part,
wherein the high risk part has a higher probability than the low risk part to
be cancelled;
~~dividing the first demand into a low risk demand having a first order rate and a~~
~~high risk demand having a second order rate;~~
dividing the first demand into a low risk demand and a high risk demand
according to the first percentage of the low risk part and the second
percentage of the high risk part;
determining an expected quantity of a first fabrication; and
~~dispatching parts a first quantity of the low risk demand and a second quantity of~~
~~the high risk demand to the first fabrication according to the expected~~
~~quantity, and the first order rate and the second order rate for the low risk~~
~~demand and the high risk demand, respectively, wherein a first quantity of~~

the low risk demand and a second quantity of the high risk demand are dispatched to the first fabrication, and the amount of the first quantity multiplied by the first order rate and the second quantity multiplied by the second order rate is equal to or greater than the expected quantity.

2. (Original): The demand dispatching method as claimed in claim 1, wherein the step of dispatching the first quantity of the low risk demand and the second quantity of the high risk demand to the first fabrication utilizes a dispatching rule as follows:

$$EQ = FQ \cdot FOR + SQ \cdot SOR,$$

wherein EQ is the expected quantity, FQ is the first quantity, FOR is the first order rate, SQ is the second quantity, and SOR is the second order rate.

3. (Original): The demand dispatching method as claimed in claim 1 further comprising dispatching a third quantity of the low risk demand of a second demand dispatched to a second fabrication to the first fabrication if the difference between the expected quantity and the first quantity is exceeding a predetermined ratio of the expected quantity.

4. (Original): The demand dispatching method as claimed in claim 3 further comprising dispatching a remnant quantity of the high risk demand of the first demand to the second fabrication.

5. (Original): The demand dispatching method as claimed in claim 3 further comprising the steps of:

monitoring the variation in the first quantity of the low risk demand of the first fabrication; and

dispatching a pilot order to the first fabrication if the variation in the first quantity of the low risk demand shows a downward trend.

6. (Currently Amended): A demand dispatch system, comprising:

a risk database recording risk information for a first demand, wherein the risk information comprises a first percentage of a low risk part and a second percentage of a high risk part of the first demand, a first order rate for the low risk part, and a second order rate for the high risk part, wherein the high risk part has a higher probability than the low risk part to be cancelled; and

an allocation planning module to receive the first demand, ~~divide the first demand into a low risk demand having a first order rate and a high risk demand having a second order rate according to the risk information~~ divide the first demand into a low risk demand and a high risk demand according to the first percentage of the low risk part and the second percentage of the high risk part, determine an expected quantity of a first fabrication, and dispatch ~~parts a first quantity of the low risk demand and a second quantity of the high risk demand to the first fabrication according to the expected quantity, and the first order rate and the second order rate for~~

the low risk demand and the high risk demand, respectively, wherein a first quantity of the low risk demand and a second quantity of the high risk demand are dispatched to the first fabrication, and the amount of the first quantity multiplied by the first order rate and the second quantity multiplied by the second order rate is equal to or greater than the expected quantity.

7. (Original): The demand dispatch system as claimed in claim 6, wherein the allocation planning module dispatches the first quantity of the low risk demand and the second quantity of the high risk demand to the first fabrication utilizing a dispatching rule as follows:

$$EQ = FQ \cdot FOR + SQ \cdot SOR,$$

wherein EQ is the expected quantity, FQ is the first quantity, FOR is the first order rate, SQ is the second quantity, and SOR is the second order rate.

8. (Original): The demand dispatch system as claimed in claim 6, wherein the allocation planning module further dispatches a third quantity of the low risk demand of a second demand dispatched to a second fabrication to the first fabrication if the difference between the expected quantity and the first quantity is exceeding a predetermined ratio of the expected quantity.

9. (Original): The demand dispatch system as claimed in claim 8, wherein the allocation planning module further dispatches a remnant quantity of the high risk demand of the first demand to the second fabrication.

10. (Original): The demand dispatch system as claimed in claim 6, wherein the allocation planning module further monitors the variation in the first quantity of the low risk demand of the first fabrication, and dispatches a pilot order to the first fabrication if the variation in the first quantity of the low risk demand shows a downward trend.

11. (Currently Amended): A demand dispatching method in an IC foundry, comprising the steps of:

receiving a first demand for a first [[IC]] integrated circuit product;

providing a risk database recording risk information for a first demand, wherein the risk information comprises a first percentage of a low risk part and a second percentage of a high risk part of the first demand, a first order rate for the low risk part, and a second order rate for the high risk part, wherein the high risk part has a higher probability than the low risk part to be cancelled;

~~dividing the first demand into a low risk demand having a first order rate and a high risk demand having a second order rate;~~

dividing the first demand into a low risk demand and a high risk demand

according to the first percentage of the low risk part and the second

percentage of the high risk part;

determining an expected quantity of a first fabrication; and

dispatching parts ~~a first quantity~~ of the low risk demand and ~~a second quantity~~ of

the high risk demand to the first fabrication according to the expected

quantity, and the first order rate and the second order rate ~~for the low risk~~

~~demand and the high risk demand, respectively,~~ wherein a first quantity of

the low risk demand and a second quantity of the high risk demand are

dispatched to the first fabrication, and the amount of the first quantity

multiplied by the first order rate and the second quantity multiplied by the

second order rate is equal to or greater than the expected quantity.

12. (Original): The demand dispatching method as claimed in claim 11, wherein the step of dispatching the first quantity of the low risk demand and the second quantity of the high risk demand to the first fabrication utilizes a dispatching rule as follows:

$$EQ = FQ * FOR + SQ * SOR,$$

wherein EQ is the expected quantity, FQ is the first quantity, FOR is the first order rate, SQ is the second quantity, and SOR is the second order rate.

13. (Currently Amended): The demand dispatching method as claimed in claim 11 further comprising dispatching a third quantity of the low risk demand of a second

demand for a second [[IC]] integrated circuit product dispatched to a second fabrication to the first fabrication if the difference between the expected quantity and the first quantity is exceeding a predetermined ratio of the expected quantity.

14. (Original): The demand dispatching method as claimed in claim 13 further comprising dispatching a remnant quantity of the high risk demand of the first demand to the second fabrication.

15. (Currently Amended): The demand dispatching method as claimed in claim 11 further comprising the steps of:

monitoring the variation in the first quantity of the low risk demand of the first fabrication; and

dispatching a pilot order for a third [[IC]] integrated circuit product to the first fabrication if the variation in the first quantity of the low risk demand shows a downward trend.

16. (Currently Amended): A demand dispatch system in an [[IC]] integrated circuit foundry, comprising:

a risk database recording risk information for a first demand for a first [[IC]] integrated circuit product, wherein the risk information comprises a first percentage of a low risk part and a second percentage of a high risk part of the first demand, a first order rate for the low risk part, and a second

order rate for the high risk part, wherein the high risk part has a higher probability than the low risk part to be cancelled; and

an allocation planning module to receive the first demand, ~~divide the first demand into a low risk demand having a first order rate and a high risk demand having a second order rate according to the risk information~~ divide the first demand into a low risk demand and a high risk demand according to the first percentage of the low risk part and the second percentage of the high risk part, determine an expected quantity of a first fabrication, and dispatch ~~parts~~ a first quantity of the low risk demand and ~~a second quantity of~~ the high risk demand to the first fabrication according to the expected quantity, and the first order rate and the second order rate ~~for the low risk demand and the high risk demand, respectively, wherein a first quantity of the low risk demand and a second quantity of the high risk demand are dispatched to the first fabrication, and the amount of the first quantity multiplied by the first order rate and the second quantity multiplied by the second order rate is equal to or greater than the expected quantity.~~

17. (Original): The demand dispatch system as claimed in claim 16, wherein the allocation planning module dispatches the first quantity of the low risk demand and the second quantity of the high risk demand to the first fabrication utilizing a dispatching rule as follows:

$$EQ=FQ*FOR+SQ*SOR,$$

wherein EQ is the expected quantity, FQ is the first quantity, FOR is the first order rate, SQ is the second quantity, and SOR is the second order rate.

18. (Currently Amended): The demand dispatch system as claimed in claim 16, wherein the allocation planning module further dispatches a third quantity of the low risk demand of a second demand for a second [[IC]] integrated circuit product dispatched to a second fabrication to the first fabrication if the difference between the expected quantity and the first quantity is exceeding a predetermined ratio of the expected quantity.

19. (Original): The demand dispatch system as claimed in claim 18, wherein the allocation planning module further dispatches a remnant quantity of the high risk demand of the first demand to the second fabrication.

20. (Currently Amended): The demand dispatch system as claimed in claim 16, wherein the allocation planning module further monitors the variation in the first quantity of the low risk demand of the first fabrication, and dispatches a pilot order for a third [[IC]] integrated circuit product to the first fabrication if the variation in the first quantity of the low risk demand shows a downward trend.

21. (Currently Amended): A method of [[IC]] integrated circuit product manufacturing, comprising the steps of:

receiving a first demand for a first [[IC]] integrated circuit product;

providing a risk database recording risk information for a first demand, wherein
the risk information comprises a first percentage of a low risk part and a
second percentage of a high risk part of the first demand, a first order rate
for the low risk part, and a second order rate for the high risk part,
wherein the high risk part has a higher probability than the low risk part to
be cancelled;

~~dividing the first demand into a low risk demand having a first order rate and a~~
~~high risk demand having a second order rate;~~

dividing the first demand into a low risk demand and a high risk demand
according to the first percentage of the low risk part and the second
percentage of the high risk part;

determining an expected quantity of a first fabrication;

~~dispatching parts a first quantity of the low risk demand and a second quantity of~~
~~the high risk demand to the first fabrication according to the expected~~
~~quantity, and the first order rate and the second order rate for the low risk~~
~~demand and the high risk demand, respectively, wherein a first quantity of~~
~~the low risk demand and a second quantity of the high risk demand are~~
~~dispatched to the first fabrication, and the amount of the first quantity~~
~~multiplied by the first order rate and the second quantity multiplied by the~~
~~second order rate is equal to or greater than the expected quantity;~~

receiving a purchase order for the first [[IC]] integrated circuit product; and

manufacturing the first [[IC]] integrated circuit product corresponding to the
purchase order in the first fabrication.

22. (Currently Amended): The method of [[IC]] integrated circuit product manufacturing as claimed in claim 21, wherein the step of dispatching the first quantity of the low risk demand and the second quantity of the high risk demand to the first fabrication utilizes a dispatching rule as follows:

$$EQ = FQ * FOR + SQ * SOR,$$

wherein EQ is the expected quantity, FQ is the first quantity, FOR is the first order rate, SQ is the second quantity, and SOR is the second order rate.

23. (Currently Amended): The method of [[IC]] integrated circuit product manufacturing as claimed in claim 21 further comprising dispatching a third quantity of the low risk demand of a second demand for a second [[IC]] integrated circuit product dispatched to a second fabrication to the first fabrication if the difference between the expected quantity and the first quantity is exceeding a predetermined ratio of the expected quantity.

24. (Currently Amended): The method of [[IC]] integrated circuit product manufacturing as claimed in claim 23 further comprising dispatching a remnant quantity of the high risk demand of the first demand to the second fabrication.

25. (Currently Amended): The method of [[IC]] integrated circuit product manufacturing as claimed in claim 21 further comprising the steps of:

monitoring the variation in the first quantity of the low risk demand of the first fabrication; and
dispatching a pilot order for a third [[IC]] integrated circuit product to the first fabrication if the variation in the first quantity of the low risk demand shows a downward trend.

26. (Currently Amended): An [[IC]] integrated circuit product produced by the process of:

receiving a first demand for a first [[IC]] integrated circuit product;
providing a risk database recording risk information for a first demand, wherein the risk information comprises a first percentage of a low risk part and a second percentage of a high risk part of the first demand, a first order rate for the low risk part, and a second order rate for the high risk part, wherein the high risk part has a higher probability than the low risk part to be cancelled;
~~dividing the first demand into a low risk demand having a first order rate and a high risk demand having a second order rate;~~
dividing the first demand into a low risk demand and a high risk demand according to the first percentage of the low risk part and the second percentage of the high risk part;
determining an expected quantity of a first fabrication;
~~dispatching parts a first quantity of the low risk demand and a second quantity of~~
the high risk demand to the first fabrication according to the expected

quantity, and the first order rate and the second order rate for the low-risk demand and the high risk demand, respectively, wherein a first quantity of the low risk demand and a second quantity of the high risk demand are dispatched to the first fabrication, and the amount of the first quantity multiplied by the first order rate and the second quantity multiplied by the second order rate is equal to or greater than the expected quantity; receiving a purchase order for the first [[IC]] integrated circuit product; and manufacturing the first [[IC]] integrated circuit product corresponding to the purchase order in the first fabrication.

27. (Currently Amended): The [[IC]] integrated circuit product as claimed in claim 26, wherein the step of dispatching the first quantity of the low risk demand and the second quantity of the high risk demand to the first fabrication utilizes a dispatching rule as follows:

$$EQ = FQ * FOR + SQ * SOR,$$

wherein EQ is the expected quantity, FQ is the first quantity, FOR is the first order rate, SQ is the second quantity, and SOR is the second order rate.

28. (Currently Amended): The [[IC]] integrated circuit product as claimed in claim 26 further comprising dispatching a third quantity of the low risk demand of a second demand for a second [[IC]] integrated circuit product dispatched to a second fabrication to the first fabrication if the difference between the expected quantity and the first quantity is exceeding a predetermined ratio of the expected quantity.

29. (Currently Amended): The [[IC]] integrated circuit product as claimed in claim 28 further comprising dispatching a remnant quantity of the high risk demand of the first demand to the second fabrication.

30. (Currently Amended): The [[IC]] integrated circuit product as claimed in claim 21 further comprising the steps of:

monitoring the variation in the first quantity of the low risk demand of the first

fabrication; and

dispatching a pilot order for a third [[IC]] integrated circuit product to the first fabrication if the variation in the first quantity of the low risk demand shows a downward trend.